IN THE CLAIMS:

Please cancel claim 20 without prejudice or disclaimer of the subject matter thereof.

The following is a complete listing of claims in this application.

Claims 1-15 (canceled).

16. (currently amended) A method of ~~treating~~ vaccinating a human or animal body ~~by vaccination~~, comprising mucosal administration of a composition comprising multilamellar vesicles with an onion-like structure having an internal liquid crystal structure formed by a stack of concentric bilayers based on amphiphilic agents alternating with layers of water, an aqueous solution or a solution of a polar liquid, and into which at least one antigen is incorporated,

thereby producing *in vivo* antibodies directed against the antigen.

17. (currently amended) A method according to claim 16, wherein said administration is carried out nasally.

18. (previously presented) A method of producing antibodies, comprising introducing into a host organism, via mucosa, lamellar vesicles with an onion-like structure having an internal liquid crystal structure formed by a stack of concentric bilayers based on amphiphilic agents alternating with layers of water, an aqueous solution or a solution of a polar liquid and into which at least one antigen is incorporated, then removing and purifying said antibodies.

19. (currently amended) A method of producing IgA, comprising introducing into a host organism, via mucosa, lamellar vesicles with a multilamellar onion-like structure with an internal liquid crystal structure formed by a stack of concentric bilayers based on amphiphilic agents alternating with layers of water, an aqueous solution or a solution of a

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polar liquid and into which the appropriate antigen is incorporated, and removing IgA produced by the host, and purifying said ~~immunoglobulins~~ IgA.

Claim 20 (canceled).

21. (currently amended) Method according to claim ~~20~~ 16, wherein said composition is a composition which induces a ~~mucousal~~ mucosal response.

22. (currently amended) Method according to claim ~~20~~ 16, wherein said composition is a composition which induces a systemic seric response.

23. (currently amended) Method according to claim ~~20~~ 16, wherein said composition induces production of antibodies.

24. (currently amended) Method according to claim ~~20~~ 16, wherein said composition is a vaccine which induces protection of the human or animal against an infection for which said antigen is responsible.

25. (previously presented) Method according to claim 24, wherein said antigen is of exogenous or intrinsic natural origin.

26. (currently amended) Method according to claim ~~20~~ 16, wherein said antigen is selected from the group consisting of:

proteins and glycosylated proteins,

peptides,

lipopeptides,

polysaccharides, and

mixtures thereof.

27. (currently amended) Method according to claim ~~20~~ 16, wherein said vesicles contain at least one surfactant selected from the group consisting of:

phospholipids,

hydrogenated phospholipids,

linear or branched, saturated or mono- or poly-

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unsaturated C_6 to C_{30} fatty acids or an alkali, alkaline earth or amine salt thereof,

esters or ethoxylated esters of said fatty acids with saccharose, sorbitan, mannitol, glycerol, polyglycerol or glycol,

mono-, di- or triglycerides or mixtures of glycerides of said fatty acids,

linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty alcohols and ethoxylated linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty alcohols,

ethers of said fatty alcohols and saccharose, sorbitan, mannitol, glycerol or polyglycerol, or glycol,

polyethoxylated vegetable oils, and hydrogenated polyethoxylated vegetable oils,

block polymers of polyoxyethylene and polyoxypropylene (poloxamers),

polyethyleneglycol hydroxystearate,

alcohols with a sterol skeleton,

sphyngolipids,

polyalkylglucosides,

copolymers of polyethylene glycol and alkylglycol, and

di- or tri-block copolymers of ethers of polyethyleneglycol and polyalkyleneglycol.

28. (currently amended) Method according to claim ~~20~~ 16, wherein said vesicles also contain at least one co-surfactant which improves rigidity and/or tightness of the membranes of said vesicles.

29. (currently amended) Method according to claim 28, wherein said co-surfactant is selected from the group consisting of:

cholesterol~~,~~ and cholesterol derivatives ~~and cholesterol~~

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~~esters~~,

derivatives with a sterol skeleton, and sterol skeleton derivatives of plant origin, and

ceramides.

30. (currently amended) Method according to claim ~~20~~ 16, wherein said vesicles also contain an immuno-modulating substance.

31. (currently amended) Method according to claim ~~20~~ 16, wherein said vesicles have diameter of said vesicles is in the range 0.1 μm to 25 μm.

32. (currently amended) Method according to claim ~~20~~ 16, wherein the bilayers of said vesicles comprise at least two surfactants, one of said surfactants having a hydrophilic-lipophilic balance (HLB) in the range 1 to 6, and the other having a hydrophilic-lipophilic balance (HLB) in the range 3 to 15.

33. (currently amended) Method according to claim ~~20~~ 16, wherein antigen in the vesicles have an encapsulation yield of more than 50%.

Claim 34 (canceled).

35. (new) Method according to claim 29, wherein the cholesterol derivative is a cholesterol ester.

36. (new) Method according to claim 18, wherein said composition is a composition which induces a mucosal response.

37. (new) Method according to claim 18, wherein said composition is a composition which induces a systemic seric response.

38. (new) Method according to claim 18, wherein said composition induces production of antibodies.

39. (new) Method according to claim 18, wherein said composition is a vaccine which induces protection of the host against an infection for which said antigen is responsible.

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40. (new) Method according to claim 39, wherein said antigen is of exogenous or intrinsic natural origin.

41. (new) Method according to claim 18, wherein said antigen is selected from the group consisting of:

proteins and glycosylated proteins,

peptides,

lipopeptides,

polysaccharides, and

mixtures thereof.

42. (new) Method according to claim 18, wherein said vesicles contain at least one surfactant selected from the group consisting of:

phospholipids,

hydrogenated phospholipids,

linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty acids or an alkali, alkaline earth or amine salt thereof,

esters or ethoxylated esters of said fatty acids with saccharose, sorbitan, mannitol, glycerol, polyglycerol or glycol,

mono-, di- or triglycerides or mixtures of glycerides of said fatty acids,

linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty alcohols and ethoxylated linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty alcohols,

ethers of said fatty alcohols and saccharose, sorbitan, mannitol, glycerol or polyglycerol, or glycol,

polyethoxylated vegetable oils, and hydrogenated polyethoxylated vegetable oils,

block polymers of polyoxyethylene and polyoxypropylene (poloxamers),

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polyethyleneglycol hydroxystearate,

alcohols with a sterol skeleton,

sphyngolipids,

polyalkylglucosides,

copolymers of polyethylene glycol and alkylglycol, and

di- or tri-block copolymers of ethers of polyethyleneglycol and polyalkyleneglycol.

43. (new) Method according to claim 18, wherein said vesicles also contain at least one co-surfactant which improves rigidity and/or tightness of the membranes of said vesicles.

44. (new) Method according to claim 42, wherein said co-surfactant is selected from the group consisting of:

cholesterol and cholesterol derivatives,

derivatives with a sterol skeleton, and sterol skeleton derivatives of plant origin, and

ceramides.

45. (new) Method according to claim 44, wherein said cholesterol derivative is a cholesterol ester.

46. (new) Method according to claim 18, wherein said vesicles also contain an immuno-modulating substance.

47. (new) Method according to claim 18, wherein said vesicles have diameter of said vesicles is in the range 0.1 μm to 25 μm.

48. (new) Method according to claim 18, wherein said bilayers of said vesicles comprise at least two surfactants, one of said surfactants having a hydrophilic-lipophilic balance (HLB) in the range 1 to 6, and the other having a hydrophilic-lipophilic balance (HLB) in the range 3 to 15.

49. (new) Method according to claim 18, wherein said antigen in the vesicles have an encapsulation yield of more than 50%.

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50. (new) Method according to claim 18, wherein said administration is nasal administration.

51. (new) Method according to claim 19, wherein said composition is a composition which induces a mucosal response.

52. (new) Method according to claim 19, wherein said composition is a composition which induces a systemic seric response.

53. (new) Method according to claim 19, wherein said composition induces production of antibodies.

54. (new) Method according to claim 19, wherein said composition is a vaccine which induces protection of the human or animal against an infection for which said antigen is responsible.

55. (new) Method according to claim 54, wherein said antigen is of exogenous or intrinsic natural origin.

56. (new) Method according to claim 19, wherein said antigen is selected from the group consisting of:

proteins and glycosylated proteins,

peptides,

lipopeptides,

polysaccharides, and

mixtures thereof.

57. (new) Method according to claim 19, wherein said vesicles contain at least one surfactant selected from the group consisting of:

phospholipids,

hydrogenated phospholipids,

linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty acids or an alkali, alkaline earth or amine salt thereof,

esters or ethoxylated esters of said fatty acids with saccharose, sorbitan, mannitol, glycerol, polyglycerol or

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glycol,

mono-, di- or triglycerides or mixtures of glycerides of said fatty acids,

linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty alcohols and ethoxylated linear or branched, saturated or mono- or poly-unsaturated C_6 to C_{30} fatty alcohols,

ethers of said fatty alcohols and saccharose, sorbitan, mannitol, glycerol or polyglycerol, or glycol,

polyethoxylated vegetable oils, and hydrogenated polyethoxylated vegetable oils,

block polymers of polyoxyethylene and polyoxypropylene (poloxamers),

polyethyleneglycol hydroxystearate,

alcohols with a sterol skeleton,

sphyngolipids,

polyalkylglucosides,

copolymers of polyethylene glycol and alkylglycol, and

di- or tri-block copolymers of ethers of polyethyleneglycol and polyalkyleneglycol.

58. (new) Method according to claim 19, wherein said vesicles also contain at least one co-surfactant which improves rigidity and/or tightness of the membranes of said vesicles.

59. (new) Method according to claim 58, wherein said co-surfactant is selected from the group consisting of:

cholesterol and cholesterol derivatives,

derivatives with a sterol skeleton, and sterol skeleton derivatives of plant origin, and

ceramides.

60. (new) Method according to claim 59, wherein said cholesterol derivative is a cholesterol ester.

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61. (new) Method according to claim 19, wherein said vesicles also contain an immuno-modulating substance.

62. (new) Method according to claim 19, wherein said vesicles have diameter of said vesicles is in the range 0.1 μm to 25 μm.

63. (new) Method according to claim 19, wherein said bilayers of said vesicles comprise at least two surfactants, one of said surfactants having a hydrophilic-lipophilic balance (HLB) in the range 1 to 6, and the other having a hydrophilic-lipophilic balance (HLB) in the range 3 to 15.

64. (new) Method according to claim 19, wherein said antigen in the vesicles have an encapsulation yield of more than 50%.

65. (new) Method according to claim 19, wherein said administration is nasal administration.

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